



NOTES:

- THIS IS A ULTRA- HIGH VACUUM COMPONENT (UHV)
- WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
 - CIMCOOL 5 STAR 49
 - TRIM SOL
- ALL SURFACES MUST BE MACHINED FOR CLEAN UP
- TUNGSTEN ALLOY OF 95% TUNGSTEN OR MORE WITH REMAINDER OF NICKEL AND IRON PER MIL-T-21014D, CLASS 3, UHV GRADE
- FINISHING: WHEN MACHINING VACUUM PARTS USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED
- CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF 1×10^{-9} TORR CAN BE ACHIEVED
- HANDLING: THE COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM FOIL TYPE DRY ANNEAL AND UNDER CLEAN ROOM CONDITIONS
- BREAK ALL SHARP CORNERS .010
- DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY
- SURFACE ROUGHNESS $63 \sqrt{\text{ }}$

REF. SOURCE

KULITE TUNGSTEN CORP.
160 EAST UNION AVENUE
EAST RUTHERFORD, NJ 07073
TEL: 1-201-438-9000
FAX: 1-201-438-0891

MITEK METALS INC,
1340 NORTH SENATE AVENUE
INDIANAPOLIS, IN 46202
TEL: 1-317-637-3574
FAX: 1-633-7224

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY																																													
<div style="display: flex; justify-content: space-between;"> <div> <p>UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES</p> <table border="1"> <tr> <th>DECIMALS</th> <th>ANGULAR</th> </tr> <tr> <td>± .1 (2.5)</td> <td>± 0°30'</td> </tr> <tr> <td>± .01 (0.25)</td> <td></td> </tr> <tr> <td>± .005 (0.13)</td> <td></td> </tr> </table> <p>SURFACE ROUGHNESS $125 \sqrt{\text{ }}$</p> <p>REMOVE ALL BURRS AND BREAK SHARP EDGES .02 MAX.</p> <p>SURFACE FINISH TO BE IN ACCORDANCE WITH LATEST AMS SPECIFICATIONS & FOLLOWING IN ACCORDANCE WITH LATEST AMS SPECIFICATIONS</p> </div> <div> <p>PARTS LIST</p> <p>P4430003-00</p> <table border="1"> <tr> <td>DRAWN BY</td> <td>DATE</td> <td>CHIEF DESIGN ENGINEER</td> <td>DATE</td> <td>TITLE</td> </tr> <tr> <td>MUSCIA</td> <td>7/12/99</td> <td>D. Shu</td> <td>12/18/99</td> <td rowspan="4"> ADVANCED PHOTON SOURCE P4-40 INTEGRAL SHUTTERS FOR 4-ID-B MIDDLE LOWER SHUTTER </td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> <td>OP. LEADER</td> <td>DATE</td> </tr> <tr> <td>J. CHANG</td> <td>12/9/99</td> <td>T.M. KUZAY</td> <td>1/13/00</td> </tr> <tr> <td>DESIGNER</td> <td>DATE</td> <td>PROJECT MGR.</td> <td>DATE</td> </tr> <tr> <td>CHANG/MUSCIA</td> <td>7/12/99</td> <td></td> <td></td> <td></td> </tr> <tr> <td>RESPONSIBLE ENGINEER</td> <td>DATE</td> <td>APPROVED/RELEASED</td> <td>DATE</td> <td></td> </tr> <tr> <td>J. CHANG</td> <td>12/9/99</td> <td></td> <td></td> <td></td> </tr> </table> </div> </div>					DECIMALS	ANGULAR	± .1 (2.5)	± 0°30'	± .01 (0.25)		± .005 (0.13)		DRAWN BY	DATE	CHIEF DESIGN ENGINEER	DATE	TITLE	MUSCIA	7/12/99	D. Shu	12/18/99	ADVANCED PHOTON SOURCE P4-40 INTEGRAL SHUTTERS FOR 4-ID-B MIDDLE LOWER SHUTTER	CHECKED BY	DATE	OP. LEADER	DATE	J. CHANG	12/9/99	T.M. KUZAY	1/13/00	DESIGNER	DATE	PROJECT MGR.	DATE	CHANG/MUSCIA	7/12/99				RESPONSIBLE ENGINEER	DATE	APPROVED/RELEASED	DATE		J. CHANG	12/9/99			
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